



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,162	09/29/2003	Jung-Seon Park	CU-3338 VE	1912
26530	7590	07/19/2006	EXAMINER	
LADAS & PARRY LLP 224 SOUTH MICHIGAN AVENUE SUITE 1600 CHICAGO, IL 60604			SNIDER, THERESA T	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/674,162

Applicant(s)

PARK ET AL.

Examiner

Theresa T. Snider

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/13/04, 1/10, 3/17, 4/10/24/05 & 4/17/06</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Information Disclosure Statement

1. The GB references cited on the information disclosure statement filed 3/17/2005 were not considered because they had been considered on the information disclosure statements filed 9/13/2004 and 1/10/2005, respectively. The US reference cited on the information disclosure statement filed 10/24/2005 was not considered because it had been considered on the information disclosure statement filed 9/13/2004.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "50" has been used to designate both air suction pipe(page 8, line 5) and path forming member(page 8, line 16). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

Art Unit: 1744

Exemplary of such:

In the title and the specification, 'upright type' should be replaced with 'upright'.

Appropriate correction is required.

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

5. Claims 1-14 are objected to because of the following informalities:

Exemplary of such:

Claims 1, 9 and 14, line 1, 'type' should be deleted.

Claims 5 and 10, line 1, 'vacuum' should be inserted before 'cleaner' to correspond with the other claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2-7 and 12-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Exemplary of such:

Art Unit: 1744

Claim 2, line 4, it is unclear as to whether the 'cyclone air outlet connected to the air inlet of the dust collecting chamber' is in addition to 'a path connected to the air inlet of the dust collecting chamber' of claim 1, line 9 or one in the same.

Claim 5, line 2, it is unclear as to whether the 'duct connected to the air inlet of the dust collecting chamber' is in addition to 'cyclone air outlet to the air inlet of the dust collecting chamber' of claim 2, line 4 or one in the same.

Claim 7, line 2, 'the first receiving depression' lacks proper antecedent basis. Should the claim be dependent from claim 6 rather than claim 5?

Claim 12, line 2, 'the cyclone air outlet' lacks proper antecedent basis.

Claim 13, line 2, 'the first receiving depression' lacks proper antecedent basis.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-3 and 8-9 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Kondo.

Art Unit: 1744

**** With respect to the dust collecting apparatus being located on the 'rear' of the main body, the claims fail to set forth the relationship of the various elements to the dust collecting apparatus. Therefore, the claims do not limit some elements to the 'front' and some elements to the 'rear'. Further, the claims fail to limit the orientation such that one side must be considered 'the rear' as opposed to 'the front'. ****

Kondo discloses a main body including a dust collecting chamber having an air inlet and an air outlet in fluid communication with a motor driving chamber (fig. 1, #16,32, fig. 3a, #214,226 OR unnumbered area between #212 and #232).

Kondo discloses a suction brush mounted on the main body (fig. 1, #14,39).

Kondo discloses a cyclone dust collecting apparatus having a path connected to the air inlet of the dust collecting chamber (fig. 3a, #200,210,214).

Kondo discloses a path forming member connecting the cyclone dust collecting apparatus and the suction brush (fig. 1, #50).

With respect to claim 2, Kondo discloses the cyclone dust collecting apparatus having a cyclone body with an air inlet connected to the path forming member and an air outlet connected to the inlet of the dust collecting chamber and a dust receptacle removably coupled to the cyclone body (fig. 3a, #200,208,210,214).

With respect to claim 3, Kondo discloses the cyclone dust collecting apparatus having a grill having a plurality of holes in the dust receptacle in fluid communication with the cyclone air outlet (fig. 3a, #228).

With respect to claim 8, Kondo discloses the path forming member being a flexible hose (fig. 1, #50).

10. Claim 1 is rejected under 35 U.S.C. 102(a,e) as being clearly anticipated by Oh('620).

Oh('620) discloses a main body including a dust collecting chamber having an air inlet and an air outlet in fluid communication with a motor driving chamber (fig. 1, #10, fig. 3, #13,13a,13b,12).

Oh('620) discloses a suction brush mounted on the main body (fig. 3, #20).

Oh('620) discloses a cyclone dust collecting apparatus having a path connected to the air inlet of the dust collecting chamber (fig. 3, #30,#37).

Oh('620) discloses a path forming member connecting the cyclone dust collecting apparatus and the suction brush (fig. 3, #14).

11. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yonkers.

Yonkers discloses a main body including a dust collecting chamber having an air inlet and an air outlet in fluid communication with a motor driving chamber (fig. 8, #50,61,62,16).

Yonkers discloses a suction brush mounted on the main body (fig. 8, #84).

Yonkers discloses a cyclone dust collecting apparatus having a path connected to the air inlet of the dust collecting chamber (fig. 8, #15,90).

Yonkers discloses a path forming member connecting the cyclone dust collecting apparatus and the suction brush (fig. 8, #81,82).

With respect to claim 8, Yonkers discloses the path forming member being a flexible hose (fig. 8, #82).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

15. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo as applied to claim 2 above, and further in view of Oh('620).

Kondo discloses a similar vacuum cleaner however fails to disclose receiving depressions in the main body.

Oh('620) discloses a vacuum cleaner having receiving depressions in the main body for a dust collecting apparatus(fig. 1, #11,13a). It would have been obvious to one of ordinary skill in the art to provide the receiving depressions of Oh('620) in Kondo to allow for secure receiving of the apparatus within the main body.

16. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oh('620).

Oh('620) discloses receiving depressions in the main body for a dust collecting apparatus(fig. 1, #11,13a).). It would have been obvious to one of ordinary skill in the art to determine which receiving depressions of Oh('620) receive which elements to allow for secure receiving of the apparatus within the main body.

17. Claims 5, 7 and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo as applied to claims 2 and 9 respectively above, and further in view of Bilek et al..

Kondo discloses a similar vacuum cleaner however fails to disclose a fixing unit.

Kondo discloses a duct connected at one end to the air inlet of the dust collecting chamber and at another end to the cyclone air outlet (fig. 3a, unnumbered duct between #210,224).

Bilek et al. discloses a vacuum cleaner having a fixing unit for detachably coupling a dust collecting apparatus to a main body (fig. 1, #400). It would have been obvious to one of ordinary skill in the art to provide the fixing unit of Bilek et al. in Kondo to ensure that the dust collecting apparatus does not become accidentally detached from the main body during use.

With respect to claims 6 and 12, Konda discloses the duct having a bent portion (fig. 3a, region near end of # 210 lead line)

With respect to claims 7 and 13, it would have been obvious to one of ordinary skill in the art to determine the most appropriate fixing unit structure in Kondo in view of Bilek et al. to allow for the most effective engagement with the greatest ease for operator operation.

Allowable Subject Matter

18. Claim 14 is allowed.

19. The following is a statement of reasons for the indication of allowable subject matter:

The prior art discloses a vacuum cleaner with a main body including a dust collecting chamber having an air inlet and an air outlet in fluid communication with a motor driving chamber, a suction brush mounted adjacent the main body, a cyclone dust collecting detachably mounted to the main body having a cyclone body, dust receptacle and grill, a flexible house connecting the dust collecting apparatus and the suction brush HOWEVER fails to disclose or fairly suggest the dust collecting apparatus may be detached from and the flexible hose connected directly to the main body so that dust and filth in the air drawn through the suction brush is separated in the dust collecting chamber.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yung, Kim and Farley et al. disclose a vacuum cleaner with a cyclone dust collecting apparatus having a path connected to an air inlet of a dust collecting chamber. Thur et al.

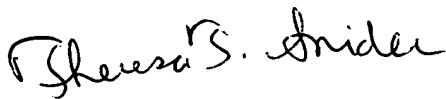
Art Unit: 1744

discloses a vacuum cleaner with a hose connected to a suction brush and the cyclone dust collecting apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Thursday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Theresa T. Snider
Primary Examiner
Art Unit 1744

7/17/2006